

## Healthy Communities and Ecosystems

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

### Progress Toward the Strategic Goal and Objectives

EPA is on track to meet its strategic goal of protecting, sustaining, and restoring the health of people, communities, and ecosystems. Significant progress was made in FY 2003 toward meeting each of the objectives supporting this goal by bringing together a variety of programs, tools, approaches, and resources; creating strong partnerships with federal, state, tribal, and local government agencies; and enlisting the support of many stakeholders.

A key component of this goal is protecting human health and the environment by identifying, assessing, and reducing the potential risks presented by the thousands of chemicals on which our society and economy have come to depend. These include the pesticides we use to meet

national and global demands for food, the industrial and commercial chemicals found throughout our homes and workplaces, and in the products we use.

EPA works to prevent or reduce risks from chemicals, microorganisms, and pesticides by identifying and assessing potential risks, and then developing strategies to address them. For example in FY 2003, EPA continued to make progress toward its goal of evaluating the potential risk of 20 chemicals to which children have a high likelihood of exposure. EPA and other federal partner actions have also made significant progress toward the

national goal of eliminating childhood lead poisoning by 2010. Specifically, the incidence of children 1 to 5 years old with elevated blood lead levels has been reduced approximately by half during the last decade.<sup>2</sup> Recently released Centers for Disease Control and Prevention data for 1999 and 2000 show the number of children younger than 6 years old with elevated blood lead levels has fallen

to approximately 400,000, down from an estimated 900,000 for the period 1991 through 1994.

EPA has reduced children's exposures to organophosphates (OPs) by approximately 60 percent by eliminating many uses of OP insecticides in and around the home.<sup>3</sup> These risk reduction programs, along with routine reviews of new industrial

chemicals and pesticides, and ongoing work to integrate emerging scientific developments into Agency assessments,<sup>4</sup> are contributing to steady progress in identifying potential human and ecological hazards and risks.<sup>5</sup>

Sharing information and building a community's capability to make decisions that positively affect the environment are at the heart of the community-centered work under this Goal. EPA's efforts to share information and build community capacity offer the public the tools needed in considering the many aspects of planned development or re-development. For example, EPA's

Brownfields Program provides states, tribes, local governments, and other stakeholders with the tools and financial assistance they need to assess, clean up, and promote the redevelopment of brownfield properties. Since 1995, EPA has assessed a total of 4,300 brownfield properties. Property assessment and cleanup completed under the Brownfields Program are the first steps towards reuse and redevelopment. The cleanup and redevelopment of these properties enables the leveraging of \$5.1 billion in public and private investments, as well as the leveraging of 25,000 jobs.<sup>6</sup>

EPA is also building capacity in international communities to make effective environmental decisions. Since 1999, the number of residents along the Mexican border who were protected against health risks, beach pollution, and damaged ecosystems as a result of improved water and wastewater sanitation systems has increased from 50,000 to a cumulative total of approximately 872,000 residents. This represents a continued upward trend over the past several years. Also, in cooperation with the New Independent States (NIS) of the former USSR, EPA and its partners have eliminated Russia's production of ozone-depleting substances; have helped prevent the deterioration of drinking water supplies for 700,000 people in the NIS; and have established, within the Russian government, an environmental revolving account, which in FY 2003 has a portfolio of 7 projects and \$90 million.

EPA's ecosystem protection programs encompass a wide range of approaches that address specific at-risk regional areas, along with larger categories of threatened systems, such as estuaries and wetlands. Locally generated pollution, combined with pollution carried by rivers and streams and through air deposition, can collect in these closed and semi-closed ecosystems, degrading them over time. EPA continues to make progress toward its 2008 goal of protecting and restoring 250,000 acres of estuarine habitat with more than 118,000 acres protected and/or restored in FY 2003.<sup>7</sup>

EPA has also made progress in ecosystems in the Gulf of Mexico, the Great Lakes, and Chesapeake Bay. A total of 6,662 acres of coastal and marine habitat has been restored or protected in the Gulf of Mexico, exceeding the target for FY 2003 and contributing toward a 10-year goal of 20,000 acres. Levels of the most critical, persistent pollutants around the Great Lakes (including mercury, polychlorinated biphenyls (PCB), dioxin, benzo(a)pyrene, and hexachlorobenzene) continue to decrease, as part of a downward trend in toxic substances in the Great Lakes over the last 15 years. In Chesapeake Bay, more than 89,500 acres of submerged aquatic vegetation (SAV), an important habitat for

aquatic life and an indicator of the health of the bay, have been measured. This represents a strong recovery of SAV in the middle bay, and significant progress toward the goal of restoring 185,000 acres by 2010.8



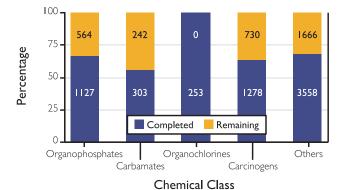
All of EPA's activities rely on the latest scientific information. Sound science must be the basis of standard-setting and guide the Agency in identifying and addressing emerging issues, as well as updating and advancing EPA's understanding of longstanding human health and environmental challenges. As an example, in FY 2003, EPA completed a draft report on the condition of the nation's estuaries that will provide the first scientifically defensible baseline from which to measure trends in the health and status of these vital ecosystems.9 This assessment of ecological condition over time will provide evidence of whether the Clean Water Act and its amendments, as well as national, regional, and state policies and programs, have been effective in improving the quality of U.S. estuaries. In addition, in FY 2003 EPA reported on the performance and cost of

technologies for reducing emissions from coal-fired utility boilers, which are among the most significant contributors of mercury to the air. This information will support the development of regulations that will costeffectively reduce human health and environmental risks from mercury.<sup>10</sup>

### FY 2003 Performance

In FY 2003, EPA reviewed and registered 19 new active ingredients qualifying as reduced risk pesticides, including 5 conventional reduced risk pesticides (1 of which is an organophosphate alternative) and 14 biopesticides. Additionally, EPA registered 425 new uses, including 3 organophosphate alternatives and 1 methyl bromide alternative. The increased availability of lower-risk pesticides, combined with public demand for safe food, encourages pesticide users to shift to reduced-risk alternatives. Pesticides considered "reduced risk"11 constituted an estimated 3.6 percent of all agricultural pesticide acre treatments in 1998. Continued implementation of improvements in Section 18 processing through a pilot within the pesticides program will help improve program performance by providing faster responses to problematic pest outbreaks. Another major accomplishment in FY 2003 was the implementation of EPA's Office of Pesticide Programs Information Network, which tracks

Figure 4-1. Tolerance Reassessment Status (as of July 2003)



The graph shows the status of EPA's tolerance reassessment program by chemical class. As of July 2003, EPA had reassessed 6,519 tolerances (68 percent out of a total of 9,721).

regulatory data and studies submitted by registrants (pesticide manufacturers and producers) in support of a registration application for a pesticide, among other functions. This system integrates 19 legacy systems, decreases data entry, and improves access to critical documents and EPA's analysis of information.

When pesticides do not meet health and environmental standards, EPA determines what changes are needed, including canceling or limiting use, under the tolerance reassessment and reregistration programs. In FY 2003, the Agency reassessed a cumulative 68 percent of the tolerances requiring reassessment under the Food Quality Protection Act (FOPA). (See Figure 4-1.) These FY 2003 accomplishments included 66.3 percent of organophosphates and carcinogens, which are among those that present the highest risk. Additionally, the Agency issued 12 Reregistration Eligibility Decisions (REDs), a cumulative 75 percent of the 612 active ingredient cases requiring reregistration under the Federal Insecticide, Fungicide, and Rodenticide Act. EPA is on track to meet its 2006 statutory deadline for completing tolerance reassessments. EPA is also on schedule to meet its goal of protecting human health and reducing dietary risks to children.

To identify potential risks from industrial chemicals, EPA screened new chemicals as they were submitted, meeting its zerotolerance standard for the introduction into commerce of chemicals that pose unreasonable risk. EPA's efforts to make screening level human health and environmental effects data about chemicals already in

commerce available on the high production volume (HPV) chemicals website kept pace with the large volume of data from industry participants.<sup>12</sup> At the end of September 2003, screening level human health and environmental effects data on 1,633 chemicals were made available to the public. EPA's Acute Exposure Guidelines Levels (AEGL) Program provides information to first responders on the adverse effects of chemical exposures at emergency or accident sites. In FY 2003, the values for 13 chemicals were finalized. The final AEGL values include nerve agents and mustard gas, and are being used for emergency planning by the military and state agencies as the military begins to destroy stockpiled chemical warfare agents.

To reduce the risks of industrial chemicals, EPA took regulatory action, provided training and technical assistance, and worked in partnership with all stakeholders. EPA and the Agency for Toxic Substances and Disease Registry collaborated in issuing guidance to homeowners who may have vermiculite attic insulation, informing them about best practices for reducing exposure.13 EPA took regulatory action to restrict the return to the U.S. marketplace of 88 perfluorooctyl sulfonate (PFOS)<sup>14</sup> chemicals that had been voluntarily phased out by the U.S. producer. EPA had received data indicating that PFOS is a PBT chemical, meaning that it is persistent in the environment, bioaccumulative in fish (an unexpected finding), and toxic. Data also showed that PFOS had been found in low concentrations in the blood of the general population and in wildlife around the world. Because the EPA regulations apply to key chemicals essential to produce PFOS, EPA's action effectively restricts the manufacture of all PFOS chemicals in the United States.

EPA continues to make progress in the U.S.-Mexico Border Region. In FY 2003, an additional 152,000 residents along the Mexican border received protection from health risks, beach pollution, and damaged ecosystems as a result of improved water and

#### AEGL 13 FINAL CHEMICALS

- Hydrogen Cyanide
- Phosgene
- 1,1,1,2-Tetrafluoroethane (HFC 134a)—replacement for fully halogenated chlorofluorcarbons
- I,I-Dichloro-I-fluoroethane (HCFC 141b)—replacement for fully halogenated chlorofluorcarbons
- Propylene glycol dinitrate
- Nerve Agent GA (Tabun)
- Nerve Agent GB (Sarin)
- Nerve Agent GD (Soman)
- Nerve Agent GF
- Nerve Agent VX
- Sulfur mustard
- Diborane
- Methyl Isocyanate

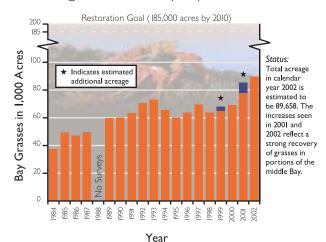
wastewater sanitation systems. On April 4, 2003, the representatives of the U.S. EPA, the Secretariat of Environment and Natural Resources, 15 10 border states, and 26 U.S. tribes met to recognize the completion of the Border 2012: U.S.-Mexico Environmental Program. This marks the beginning of a 10-year joint effort to work with municipalities, non-governmental organizations, educational institutions, and border residents to improve public health and the environment along the U.S.-Mexico Border.<sup>16</sup> EPA continues to evaluate environmental health needs and to facilitate the construction of environmental infrastructure with the Border **Environment Cooperation Commission** (BECC) and the North American Development Bank.<sup>17</sup>

In FY 2003, EPA's Brownfields Program awarded more than \$69 million in

brownfields grants including 115 Assessment Grants, 28 Revolving Loan Fund Grants, 10 Job Training Grants, and 50 newly authorized Cleanup Grants. These grants allow local governments, nonprofits, states, tribes, and other eligible entities to assess, clean up, and promote the redevelopment of brownfields properties, leveraging jobs and investments in communities. In FY 2003, EPA's Brownfields Program also distributed \$49.6 million among all 50 states, 30 tribes, the District of Columbia, and the Virgin Islands. This is the first year that funding was distributed under the authorities of the Small Business Liability Relief and Brownfields Revitalization Act.<sup>18</sup> This funding will enable states and tribes to develop or enhance their response programs' infrastructure and capabilities. For some recipients, the funding will provide an opportunity to create new response programs to address contaminated properties. States and tribes also can use the new funding to capitalize a revolving fund for cleanup, purchase environmental insurance, or develop other insurance mechanisms to provide financing for clean-up activities. The funds can also be used to establish or maintain the statutorily required public record and to oversee cleanups.19

Levels of the most critical, persistent pollutants around the Great Lakes continued to decrease in 2002, according to information reported in FY 2003. Success in reducing these pollutants has been due to a combination of

Figure 4-2. Healthy Bay Grasses



stronger regulations and voluntary actions. Although EPA and state partners have made progress in removing contaminants from the Great Lakes ecosystem, 20 concentrations of certain contaminants in Lake Erie and Lake Superior fish are no longer decreasing. Some contaminants, such as polybrominated diphenyl ethers—used as flame retardants in products such as textiles, polyurethane foam, and plastics—have been detected in Great Lakes fish at increasing concentrations.<sup>21</sup> Other significant challenges to the Great Lakes that EPA and partners are attempting to address include an apparent increase of phosphorus levels in Lake Erie and continuing entry of non-native species. To address these challenges, EPA is promoting: chemical integrity by reducing toxic substances; physical integrity for the health of diverse communities of plants, fish, and other aquatic life and wildlife; and biological integrity to restore and maintain self-sustaining populations of predominantly native fish and aquatic life, wildlife, and plants. In addition, EPA is developing positive working relationships with the environmental community to establish effective programs, coordinate authorities and resources, report on progress, and hold forums for information exchange and collective decision making. These steps will ensure the protection of the Great Lakes and the achievement of the objectives of the Great Lakes Water Quality Agreement.

EPA's measure of SAV represents the cumulative number of acres of habitat, important for sustaining aquatic life in Chesapeake Bay, measured during the year. (See Figure 4-2.) By the end of FY 2003, more than 89,500 acres of SAV have been measured, exceeding the target of 86,000 acres. EPA also exceeded its commitment to restore riparian forest buffers, which play an important role in providing habitat and reducing pollutant loads from nonpoint sources to local waterways and the Bay.<sup>22</sup>

In FY 2003, EPA protected and restored more than 118,000 acres of estuarine habitat. The actual number of acres protected and

restored exceeded the National Estuary Program's goal of 86,000 habitat acres due to a number of factors, including unanticipated changes in federal funding levels for habitat protection and restoration at the state and local levels, growth in community interest and involvement in protection and restoration, and the enhanced capacity of EPA and its partners to collect and report on data depicting protection and restoration achievements. EPA assisted Gulf states in implementing actions to restore beneficial uses in 97 coastal river and estuary segments in FY 2003, exceeding the yearly target of 14 segments, to achieve 20 percent restored quality in impaired segments in 12 priority areas of the Gulf. A total of 6,662 acres of coastal and marine habitats were restored or protected in the Gulf of Mexico, exceeding the FY 2003 target of 2,400 acres.

Also in FY 2003, EPA released for peer review a draft of the first full assessment of the nation's estuaries with regard to water quality, sediment quality, and aquatic living resources. This is the second in a series of coastal condition reports, but represents the first set of completely consistent monitoring data for coastal systems across the United States.<sup>23</sup> The first report, released in 2001, reflected available monitoring data from 1990 through 1996 and had little or no information for New England, the West Coast, Alaska, Hawaii, or Puerto Rico. The draft report completed in FY 2003 characterizes conditions from 1999 through 2000 for all of the coastal resources of the lower 48 states (21 coastal states) and Puerto Rico, and describes surveys completed for Alaska and Hawaii (for which results are not yet available). Overall U.S. condition was rated as fair, a slight numeric improvement from the same "fair" baseline condition that

existed in the early 1990s.<sup>24</sup> For this report, EPA and its partners (all 23 coastal states and Puerto Rico) collected estuarine and coastal data at approximately 1,500 stations along the coasts of the United States (excluding the Great Lakes). An additional installment is planned for FY 2005.

In June 2003, the Agency released the Toxics Release Inventory (TRI) annual public data release report that contains information on toxic chemical releases and other waste management activities by certain covered industries as well as by federal facilities reporting in calendar year 2001. The TRI data, in conjunction with other information, can be used as a starting point in evaluating exposures from these toxic chemicals, and assist communities in making informed decisions about protecting their environment. In FY 2003, EPA reduced TRI reporting burden on industry, while improving TRI data quality by continuing to promote and distribute its new software data collection tool, "TRI Made-Easy (TRI-ME)". As of August 29, 2003, 19,539 of the 21,196 facilities that have reported for Reporting Year 2002 used TRI-ME to complete their submissions. TRI-ME allowed 26 percent of the facilities to use EPA's Central Data Exchange (CDX) to submit forms and certification statements via the Internet, compared to 7 percent last year—a trend expected to continue.25 The Agency expects to further increase the percentage of TRI reporting forms that are submitted in electronic format, thereby increasing the quality of the data and allowing for an earlier public release of the data. Through electronic tools, such as the TRI Explorer, EPA encourages more user-friendly access to important facility data, which informs environmental decision making.26 More information on TRI can be found in Goal 5.

### Assessment of Impacts of FY 2003 Performance on FY 2004 Annual Plan

# Number of Goals Met: 8 Number of Goals Not Met: 3 Number with Data Lag: 5

# Annual Performance Goals (APG) and Measures Goal 4: Healthy Communities And Ecosystems

APG 34	Review Pesticide Active Ingredients	Planned	Actual
FY 2003	Assure that pesticides' active ingredients registered prior to 1984 and the products that contain them are reviewed to assure adequate protection for human health and the environment. Also consider the unique exposure scenarios such as subsistence lifestyles of Native Americans in regulatory decisions. Goal Not Met.		
	Performance Measures		
	—Product Reregistration.	350 actions	306
	—Reregistration Eligibility Decision (RED) (cumulative).	76%	<b>75</b> %
	—Tolerance Reassessment.	68%	68%
	—Tolerance reassessments for top 20 foods eaten by children.	75%	65.6%
FY 2002	Same goal, different target. Goal Not Met.		
	Performance Measures		
	—Product Reregistration.	750	314
	—Reregistration Eligibility Decision (cumulative).	76.4%	72.7%
FY 2002	By the end of 2002 EPA will reassess a cumulative 66% of the 9,721 pesticide tolerances required to be reassessed over 10 years. This includes 67% of the 893 tolerances having the greatest potential impact on dietary risks to children. Goal Met.	66% 67%	66.9% 65.6%
FY 200I	Same goal, different target. Goal Not Met.	40% 46%	40% 44%
FY 2000	EPA will reassess 20% of the existing 9,721 tolerances to ensure that they meet the statutory standard of "reasonable certainty of no harm." Goal Not Met.	1,250	121

**FY 2003 Result:** The Agency did not meet its FY 2003 requirements for product reregistration or REDs. Product reregistrations are based on the REDs completed in previous years, of which EPA did not meet the target, therefore affecting product reregistration targets. For FY 2003, I2 REDs were completed. The Agency is on track to complete all 6I2 REDs by August 2006, and all product reregistrations by 2008. Eighty-seven percent of the tolerance reassessments for the top 20 foods eaten by children were completed, which substantially met its target. Children's tolerances are a small subset of the broader category of tolerances.

The Agency met its FY 2003 goal for the broader category of tolerance reassessment and is on track to meet its statutory target and deadline for reassessing 9,72l pesticide tolerances by August 2006. Meeting these goals will help ensure that human health and the environment are protected from harmful effects of pesticides, and that food is safe for consumption. The relationship of REDs to product registration is that one RED can result in any number of product registrations (from one to many). Fewer REDs completed will result in fewer future product registrations. Product reregistrations are generally completed 2 years after the RED is done.

APG 35	Agricultural Partnership	Planned	Actual
FY 2003	Reduce public and ecosystem risk from pesticides.  Goal Not Met.		
	Performance Measures  — Number of incidents and mortalities to terrestrial and aquatic wildlife caused by the I5 pesticides responsible for the greatest mortality to such wildlife.	20%	9%
FY 2002	Implementation of I0-I5 additional model agricultural partnership projects that demonstrate and facilitate the adoption of farm management decisions and practices that provide growers with a "reasonable transition" away from the highest risk pesticides. Goal Met.	10-15	12

**FY 2003 Result:** Data being reported in FY 2003 covers the average for 3 years (1999-2001). Avian mortalities have increased by 30.9% from the 1995 baseline. This is primarily due to increased kills resulting from West Nile Virus, and not pesticide use. As a result, the Agency reports that the goal is not met for the Bird Kills. For Fish Kills, the change from the baseline is -58.3%, which indicates that EPA has greatly exceeded its goal, however this change is greatly due to circumstances other than pesticide use, including less reporting by states and a change in the FIFRA 6(a)2 rule which allows for aggregate reporting which cannot be entered in the database and therefore is not counted.

APG 36	Decrease Risk from Agricultural Pesticides	Planned	Actual
FY 2003	Decrease adverse risk from agricultural uses from 1995 levels and assure that new pesticides that enter the market are safe for humans and the environment through ensuring that all registration actions are timely and comply with standards mandated by law. Data Lag.		
	Performance Measures	110	124
	<ul><li>Register safer chemicals and biopesticides (cumulative).</li><li>New Chemicals.</li></ul>	118 67	124 72
	—New Uses.	350	425
	<ul> <li>Percentage of acre treatments with reduced risk pesticides.</li> </ul>	8.1%	data available
	—Occurrences of residues on a core of 19 foods eaten by children relative to occurrence levels for those foods reported in 1994-1996.	20	in 2004
FY 2002	Same goal, different target. Goal Met.		
	Performance Measures		
	—Register safer chemicals and biopesticides (cumulative).	105	107
FY 2002	Detections of residues of carcinogenic and cholinesterase inhibiting neurotoxic pesticides on foods eaten by children will have decreased by 15% (cumulative) from their average 1994 to 1996 levels. Goal Met.	15%	20%

APG 36	Decrease Risk from Agricultural Pesticides (continued)	Planned	A ctual
FY 2002	At least 1% of acre-treatments will use applications of reduced risk pesticides. Goal Met.	1%	7.5%
FY 2001	Same goal, different target. Goal Not Met.		
	Performance Measures		
	<ul> <li>Register safer chemicals and biopesticides (cumulative).</li> </ul>	96	92
FY 2000	Decrease adverse risk from agricultural uses from 1995	6	6
	levels and assure that new pesticides are safe by such	2,200	3,069
	actions as registering 6 new chemicals, 2,200 amendments,	600	1,106
	600 me-toos, 200 new uses, 45 inerts, 375 special registra-	200	427
	tions, 225 tolerances and 13 reduced risk chemicals/	45	95
	biopesticides. Goal Met.	375	458
		225	452
		13	16

**FY 2003 Result:** Data will be available for two of the five measures in FY 2004. EPA exceeded its targets for the three measures for which final results data are available. For example, EPA exceeded its FY 2003 targets for registering safer chemicals and biopesticides. Cumulatively (since 1996), EPA has registered 124 reduced risk pesticides (19 in FY 2003) and 72 new conventional pesticides (II in FY 2003), which help to ensure that growers have an adequate number of pest control options available to them. In FY 2003, EPA completed 425 new use actions.

**FY 2002 Result Available in FY 2003:** Data reported in FY 2003, for the FY 2002 reporting period, exceeded the target for decreasing the residues of carcinogenic and cholinesterase inhibiting neurotoxic pesticides on foods eaten by children from 15% to 20% (cumulative) from their average 1994 to 1996 levels.

FY 2003	Reduce lead exposure in housing units and in the deleading of bridges and structures. Goal Met.		
	Performance Measures		
	<ul> <li>Certified nationally (federally-administered and state-administered program).</li> </ul>	5,000	5,561
FY 2002	Implement certification and training of lead abatement professionals. Goal Met.		-
	<ul><li>Performance Measures</li><li>—Certified nationally (federally-administered and state-administered program).</li></ul>	4,000	4,574

and states' efforts to train and certify proficiency in this area.

APG 38	Process and Disseminate TRI Information	Planned	Actual
FY 2003	Expanded information on releases and waste management of lead and lead compounds will be reported by 8,000 facilities in TRI in Reporting Year 2001 and increased usage of TRI-ME will result in total burden reduction of 25% for Reporting Year 2002. Goal Met.	8,000 25%	8,56l 25%
FY 2002	EPA will reduce reporting burden, improve data quality, lower program costs, and speed data publication by increasing the amount of Toxics Release Inventory (TRI) electronic reporting from 70% to 85%. Goal Met.	85%	92%
FY 2001	Process all submitted facility chemical release reports; publish annual summary of TRI data; provide improved information to the public about TRI chemicals; and maximize public access to TRI information. Goal Met.		
	Performance Measures		
	—TRI Public Data Release.	I report	I report
	—Chemical submissions and revisions processed.	10,000	120,000
FY 2000	Same goal as FY 2001, different targets. Goal Met.		
	Performance Measures		
	—TRI public data release.	I	
	—Form R's processed.	10,000	19,000
	—TRIS database complete and report issued.	Feb. 2001	Apr. 2001

**FY 2003 Result:** In FY 2003, EPA published a total of 95,513 reports from approximately 24,986 facilities. Of these reports, 8,561 were for lead and lead compounds. This represents the first reports for lead and lead compounds as persistent, bioaccumulative and toxic (PBT) chemicals which has a lower reporting threshold than non-PBT chemicals. Lead and lead compounds are part of the original list of chemicals under the Emergency Planing and Community Right-to-Know Act of 1986.

As a result of the FY 2003 accomplishment, the public will have greater access to information about lead and lead compounds' releases into the environment. Facilities took advantage of the new, paperless, electronic signature certification features of TRI-ME to submit forms and certifications via the Internet through the Central Data Exchange (CDX). This represents an improvement over FY 2002 when facilities submitting via CDX had to print, sign, and mail a hard copy certification statement, and continues to make the reporting process significantly easier, faster, and more accurate.

APG 39	New Chemicals and Microorganisms Review	Planned	Actual
FY 2003	Of the approximately 1,800 applications for new chemicals and microorganisms submitted by industry, ensure those marketed are safe for humans and the environment. Increase proportion of commercial chemicals that have undergone pre-manufacture notice review to signify they are properly managed and may be potential green alternatives to existing chemicals. Goal Met.	1,800	1,633*
FY 2002	Same goal. Goal Met.	1,800	1,943
FY 2001	Same goal. Goal Met.	1,800	1,770*
FY 2000	Same goal. Goal Met.	1,800	1,838

**FY 2003 Result:** EPA reviewed 1,633 Section 5 notices received during FY 2003 (735 of these Section 5 notices were valid Pre-Manufacturing Notices (PMNs). At the end of FY 2003, 22.4 % of all chemicals in commerce had been assessed for risks. Many of these chemicals also may be "green" alternatives to existing chemicals in commerce. "Green" chemicals reduce the impact on human health and the environment.

\* NOTE: While the actual number of chemicals for which PMNs were reviewed is lower than the target, the target was set to reflect EPA's commitment to comply with statutorily-mandated 90-day reviews of all PMNs submitted in 2001 and 2003, which it did. Under the Toxic Substances Control Act, EPA does not control the pace at which companies submit PMNs for review, but it does control the pace at which it completes such reviews. Accordingly, the Agency has determined this performance goal to have been met.

APG 40	Chemical Right to Know Initiative	Planned	Actual
FY 2003	Provide information and analytical tools to the public for accessing the risk posed by toxic chemicals. Data Lag.		
	Performance Measures		
	—Make existing screening level health and environmental effects information and plans to develop needed data publicly available for high production volume (HPV) chemicals sponsored in the US HPV Challenge.	1,200	data available in 2004
FY 2002	Same goal. Goal Met.	I0% data (280 chemicals)	843 chemicals
FY 2001	EPA will make publicly available data from test plans submitted by industry or chemicals already in commerce. Goal Met.		
	Performance Measures  —Through chemical testing program, obtain test data for high production volume chemicals on master testing list.	800	724 chemicals*

**FY 2003 Result:** The FY 2003 target was set to reflect EPA's commitment to make publicly available all test data that it received from companies in calendar year 2003. Therefore, there is a data lag for reporting until January 2004. Under the HPV Challenge, EPA does not control the pace at which companies submit their test data, but it does control the pace at which such data are made public. Accordingly, EPA expects to meet this performance goal since as of August 2003, I,068 chemicals have data available and an end of year surge is expected.

\* NOTE: While the actual number of chemicals for which test data were obtained was lower than the target, the target was set to reflect EPA's commitment to make publically available all test data that it received from companies in 2001, which it did. Under the HPV Challenge voluntary program, EPA does not control the pace at which companies submit their test data, but it does control the pace at which such data are made public. Accordingly, the Agency determined this performance goal to have been met.

APG 4I	Revitalized Brownfields Properties	Planne	d Actual
FY 2003	Leverage of general \$0.9 billion through revitalization efforts. Data Lag.		
	Performance Measures		
	<ul> <li>Amount of cleanup and redevelopment funds leveraged at Brownfields sites.</li> </ul>	\$0.9 B	data available
	—Number of Brownfield properties assessed.	1,000	in 2004
FY 2002	EPA will provide additional site assessment funding to 38 new communities, and to 38 existing communities, resulting in a cumulative total of 3,100 properties assessed, the generation of 19,300 jobs, and the leveraging of \$4.0 billion in cleanup and redevelopment funds since 1995. Goal Met.	3,100 19,300 \$4.0 B	3,807 21,737 \$4.8 B
FY 200I	Same goal, different targets. Goal Met.	2,500 12,000 \$3.1 B	2,754 (properties) 17,307 (jobs) \$3.7 B
FY 2000	Same goal, different targets. Goal Met.	1,900 4,900 \$1.7 B	2,024 (properties) 7,446 (jobs) \$2.8 B

FY 2003 Result: Two quarters of performance data were available at the time of report publication. Complete FY 2003 performance data will be available in April 2004 as a result of the grantee reporting cycle.

Based on second quarter data, EPA believes the Brownfields Program is on track to meet its performance goals of assessing 1,000 brownfields properties and leveraging of \$0.9 billion in cleanup and redevelopment funding. At mid-year, 369 brownfields properties had been assessed and \$0.2 billion in cleanup and redevelopment funding had been leveraged. The program expects a surge in the second half of FY 2003. Since 1995, a total of more than 4,300 properties have been assessed and Brownfields activities have resulted in the leveraging of over \$5.1 billion in cleanup and redevelopment funding.

APG 42	Brownfield Site Assessment Grants	Planned	Actual
FY 2003	Create jobs through revitalization efforts. Data Lag.  Performance Measures		
	<ul><li>—Number of jobs generated from Brownfields activities.</li><li>—Percentage of Brownfields job training.</li></ul>	2,000 65%	data available in 2004

FY 2003 Result: Two quarters of performance data were available at the time of report publication. Complete FY 2003 performance data will be available in April 2004 as a result of the grantee reporting cycle. Based on second quarter data, EPA believes the Brownfields Program is on track to meet its performance goals of leveraging 2,000 jobs and achieving a 65% placement rate for Brownfields Job Training Program participants. At mid-year, 1,070 jobs had been leveraged and 62% of Brownfields Job Training Program participants had been placed. Since 1995, Brownfields activities have resulted in the leveraging of 25,000 jobs. (See APG 4I for trend information due to prior year performance measures being presented in the Revitalized Brownfields Properties goal.)

APG 43	U.SMexico Border Water/Wastewater Infrastructure	Planned	Actual
FY 2003	Increase the number of residents in the Mexico border area who are protected from health risks, beach pollution, and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service. Goal Not Met.		
	Performance Measures		
	—Number of additional people in Mexico border area protected from health risks because of adequate water and wastewater sanitation systems funded through Border Environmental Infrastructure Fund.	900,000	872,000
FY 2002	Same goal, different target. Goal Not Met.		
	Performance Measures  —Number of additional people in Mexico border area protected from health risks because of adequate water and wastewater sanitation systems funded through Border Environmental Infrastructure Fund.	790,000	720,000
FY 2001	Same goal, different targets. Goal Met.	600,000	576,405
FY 2000	Five additional water/wastewater projects along the Mexican border will be certified for design-construction for a cumulative total of 30 projects. Goal Met.	5	10

risks because of adequate water and wastewater sanitation systems funded through the Border Environmental Infrastructure Fund. To date 872,000 people, or 96.9% of the target of 900,000 people, have realized this benefit. This effort requires considerable coordination among six Mexican and four U.S. states, municipalities with varying capacity, as well as two international organizations that certify the projects and issue subgrants for individual projects.

APG 44	Protecting and Enhancing Estuaries	Planned	Actual
FY 2003	Restore and protect estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs). Goal Met.		
	Performance Measures		
	—A cres of habitat restored and protected nationwide as part of the National Estuary Program (annual).	86,000	118, 171
FY 2002	Same goal, different targets. Goal Met.	50,000	137,710
FY 2001	Same goal, different targets. Goal Met.		
	Performance Measures		
	<ul> <li>Acres of habitat preserved, restored and/or created nationwide as part of the National Estuary Program (cumulative).</li> </ul>	50,000	70,000

**FY 2003 Result:** EPA's National Estuary Program exceeded this year's goal of recovering and protecting 86,000 acres of habitat due to several factors including growth in community interest and involvement in protection and restoration as well as the enhanced capacity of EPA and its partners to collect and report on data depicting protection and restoration achievements.

APG 45	Great Lakes: Ecosystem Assessment	Planned	Actual
FY 2003	Great Lakes ecosystem components will improve, including progress on fish contaminants, beach closures, air toxics, and trophic status. Data Lag.		
	Performance Measures		
	<ul> <li>Long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish.</li> </ul>	5%	data available
	<ul> <li>Long-term concentration trends of toxic chemicals in the air.</li> </ul>	7%	in FY 2004
	—Total phosphorus concentrations (long-term, Ug/l) in the Lake Erie Central Basin.	10	18.4
FY 2002	Same goal, different targets. Goal Not Met.		
	Performance Measures		
	<ul> <li>Long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish.</li> </ul>	declining	declining
	—Long-term concentration trends of toxic chemicals in the air.	declining	declining
	—Total phosphorus concentrations (long-term, Ug/I) in the Lake Erie Central Basin.	improving	mixed
FY 200I	Great Lakes ecosystem components will improve, including progress on fish contaminants, beach closures, air toxics, and trophic status. Goal Met.		
	Performance Measures		
	<ul> <li>Concentration trends of toxics (PCBs) in Great Lakes top predator fish.</li> </ul>	declining	uncertain
	—Concentration trends of toxic chemicals in the air.	declining	declining
	—Trophic status and phosphorous concentrations in the Great Lakes.	improving	improving
FY 2000	Measurable improvements in Great Lakes ecosystem components. Goal Met.		
	Performance Measures		
	— Indicator indices.	9	10
	—Model predictions for toxics reductions.	5	5

FY 2003 Result: The data for the measures regarding toxics concentrations in fish and air will not be available until the second quarter of FY 2004. The Lake Erie phosphorus problem is linked to the increased "dead zone," the subject of an ongoing EPA-led study. EPA expects the final report will be ready by the end of calendar year 2004. Causes and management implications are still being determined; however, invasive species, especially zebra and quagga mussels, appear to be a factor. For further information on Great Lakes indicators see <a href="https://www.epa.gov/glnpo/glindicators/">www.epa.gov/glnpo/glindicators/</a>. EPA scientists are meeting in mid-November to begin to develop strategies for managing the Lake Erie phosphorous issues.

APG 46	Chesapeake Bay Habitat	Planned	Actual
FY 2003	Improve habitat in the Chesapeake Bay. Goal Met.		
	Performance Measures  —Acres of submerged aquatic vegetation (SAV) present in the Chesapeake Bay (cumulative).	86,000	89,659

FY 2003 Results: EPA exceeded its target due to management actions to reduce nutrient loads, coupled with reduced runoff due to dry weather. Current efforts to develop state standards for water clarity are expected to result in increased efforts to reduce nutrient and sediment pollution and achievement of the long-term goal of 185,000 acres of submerged aquatic vegetation (SAV). In 1984, 38,000 acres were measured as a baseline. The increase in the number of acres measured, 89,659 acres in FY 2003, is an indication that water quality is being improved.

APG 47	Gulf of Mexico	Planned	Actual
FY 2003	Assist the Gulf States in implementing watershed restoration actions in 14 priority impaired coastal river and estuary segments. Goal Met.	14	95

**FY 2003** Result: In FY 2003, EPA assisted Gulf States in implementing restoration actions to improve water quality in 97 coastal river and estuary segments listed as impaired under section 303(d) of the Clean Water Act. This result is due to the increasing effectiveness of interagency coordination and focus on correcting water quality impairments that impede economic sustainability of coastal communities. The reason for exceeding this year's target by such a large amount is due to the choices made the states receiving EPA grants to undertake Gulf of Mexico restoration work. The grantees selected for FY 2003 concentrated their efforts on II estuaries that resulted in improving 97 segments. It was not well understood when the target was established that the grantees would end up selecting this amount of work.

APG 48	Enhanced Institutional Capabilities	Planned	Actual
FY 2003	Enhance environmental management and institutional capabilities in priority countries. Goal Met.		
	Performance Measures		
	<ul> <li>Assist in the development or implementation of improved environmental laws or regulations in priority countries.</li> </ul>	I country	l country
	<ul> <li>Increase the transfer of environmental best practices among the United States and its partner countries and build the capacity of developing countries to collect, analyze, or disseminate environmental data.</li> </ul>	3 countries	3 countries
	<ul> <li>Increase the capacity of programs in Africa or Latin America to address safe drinking water quality issues.</li> </ul>	I country	l country

APG 48	Enhanced Institutional Capabilities (continued)	Planned	Actual
FY 2002	Same goal, different targets. Goal Met.		
	Performance Measures  —Assist in the development or implementation of improved environmental laws or regulations in priority countries.	2 countries	2 countries
	—Increase the transfer of environmental best practices among the United States and its partner countries and build the capacity of developing countries to collect, analyze, or disseminate environmental data.	3 countries	3 countries
	<ul> <li>Increase the capacity of programs in Africa or Latin America to address safe drinking water quality issues.</li> </ul>	3 countries	3 countries
FY 200I	Same goal, different targets. Goal Met.		
	Performance Measures		
	<ul> <li>Number of countries or localities (3) that have adopted new or strengthened environmental laws and policies.</li> </ul>	3	3
	—Number of organizations (3) that have increased environ- mental planning, analysis, and enforcement capabilities.	3	3
	<ul> <li>Number of organizations (3) that have increased capabilities to generate and analyze environmental data and other information.</li> </ul>	3	3
	<ul> <li>Number of organizations (3) that have increased public outreach and participation.</li> </ul>	3	4
	—Number of targeted sectors (3) that have adopted cleaner production practices.	3	2
	<ul> <li>Number of cities (3) that have reduced mobile-source based ambient air pollution concentrations.</li> </ul>	3	3
FY 2000	Deliver 30 international training modules; implement 6	30	12
	technical assistance/technology dissemination projects;	6	6
	implement 5 cooperative policy development projects; and disseminate information products on U.S. environmental	5	5
	technologies and techniques to 2,500 foreign customers. Goal Met.	2,500	3,100

FY 2003 Result: FY 2003 efforts included providing Chemicals Information and Exchange Network training to all 7 Central American countries which resulted in more than 100 chemicals managers being trained in accessing chemical information via the Internet, and in networking with regional and global counterparts. EPA also helped introduce energy-efficient building codes in approximately half of the 89 regions in Russia, which reduces CO<sub>2</sub>-equivalent emissions and conventional air pollutants and leads to cost savings to the Russian economy of approximately \$50 million per year. The Water for Africa program activities resulted in increased health awareness, increased community empowerment, and increased institutional capacity.

APG 49	Protecting and Enhancing Estuaries	Planned	Actual
FY 2003	Provide the public with a reliable and statistically valid baseline for the condition of nation's estuaries against which to measure the success of ecosystem protection and risk management practices. Goal Met.		
	Performance Measures  —Report on the condition of nation's estuaries based on a statistically valid sampling design so that data is comparable across the nation.	l report	l report

FY 2003 Result: EPA developed a reliable and statistically valid baseline for the condition of the nation's estuaries against which to measure the success of ecosystem protection and risk management practices. EPA completed a draft of the second National Coastal Condition Report, a comprehensive and consistent assessment of the ecological condition of the estuarine resources of the United States and Puerto Rico (excepting Alaska and Hawaii). The report uses five indicators to assess overall condition for five regions of the country and for the United States overall. Overall, the U.S. condition was rated as fair, a slight improvement from the baseline condition that existed in the early 1990s. This approach allows comparison to conditions described in an earlier report (covering 1990 to 1996), and this comparison permits a measure of the success of ecosystem protection and risk management practices. The report will be available for public comment in November 2003.

# Prior Year Annual Performance Goals Without Corresponding FY 2003 Goals

(Actual Performance Data Available in FY 2003 and Beyond)

FY 2000	Administer federal programs and oversee state implementation of programs for lead-based paint abatement certification and training in 50 states, to reduce exposure to lead-based paint and ensure significant decreases in children's blood levels by 2005.	Target year is FY 2005
FY 1999	Complete the building of a lead-based paint abatement certification and training in 50 states, to ensure significant decreases in children's blood levels by 2005 through year is reduced exposure to lead-based paint.	Target year is FY 2005
FY 1999	Develop an verify innovative methods and models for assessing the susceptibilities of population to environmental agents, aimed at enhancing risk assessment and management strategies and guidelines.	Target year is FY 2008

### FY 2002 Annual Performance Goals

(No Longer Reported for FY 2003)

- Provide information and analytical tools to the public for accessing the risk posed by toxic chemicals.
- Ensure that EPA's policies, programs and activities address disproportionately exposed and under-represented population issues so that no segment suffers disproportionately from adverse health and environmental effects.

#### **NOTES**

- 1. US EPA, Office of Pollution Prevention and Toxics, Voluntary Children's Chemicals Evaluation Program (VCCEP) Commitment Tracking System.
- 2. Centers for Disease Control, National Center for Health Statistics, National Health and Nutrition Examination Survey: 1999-2002. Available at http://www.cdc.gov/nchs/nhanes.htm.
- Organophosphates are a class of widely used, older pesticides of concern for their adverse effects on the functioning of the nervous system.
- Examples of emerging scientific development include decontamination techniques for Homeland Security
  Operations, targeted risk profiles for sensitive populations (tribes, children), special ecological cases
  (endangered species), and chemicals of concern (endocrine disruptors).
- 5. US EPA, Office of Science Coordination and Policy, Endocrine Disruptor Screening and Testing Program. Available at http://www.epa.gov/scipoly/oscpendo/.
- Due to the grantee reporting cycle, the Brownfields Program can only report on the first two quarters of FY 2003. Data are from the Brownfields Management System (BMS). For more information, visit http://www.epa.gov/brownfields/.
- 7. The specific language for this strategic target reads as follows: "By 2008, working with National Estuary Program (NEP) partners, protect or restore an additional 250,000 acres of habitat within the study areas for the 28 estuaries that are part of the NEP."
- 3. Information on the submerged aquatic vegetation measure is available at http://www.chesapeakebay.net/status.cfm?sid=88&subjectarea=.
- 9. For more information about EPA's National Coastal Assessment, please visit http://www.epa.gov/emap/nca/index.html.
- Performance and Cost of Mercury and Multipollutant Emission Control Technology Applications on Electric Utility Boilers (EPA-600/R-03/110).
- 11. Reduced-risk or "safer" pesticides are those that meet certain criteria and are registered through the Reduced-Risk Initiative and biopesticides PRN 97-3 of Sept. 4, 1997, entitled Guidelines for Expedited Review of Conventional Pesticides under the Reduced-Risk Initiative and for Biological Pesticides, available at <a href="http://www.epa.gov/PR">http://www.epa.gov/PR</a> Notices/.
- 12. US EPA, Office of Pollution Prevention and Toxics, High Production Volume Challenge Program, HPV Commitment Tracking System. Available at <a href="http://www.epa.gov/chemrtk/viewsrch.htm">http://www.epa.gov/chemrtk/viewsrch.htm</a>.
- 13. US EPA, Office of Pollution Prevention and Toxics and U.S. Health and Human Services Agency for Toxic Substances and Disease Registry. *Current Best Practice for Vermiculite Attic Insulation*. EPA 747-F-03-001. May 2003. Washington D.C.
- 14. Perfluorooctyl sulfonate had been widely used in soil and stain repellency and other applications. Two final rules issued in the U.S. Federal Register: (1) 67 FR 11008, FRL-6823-6, March 11, 2002, and (2) 67 FR 72854, FRL-7279-1, December 9, 2002.
- 15. Mexico's equivalent to the U.S. Environmental Protection Agency.
- US EPA, Border 2012: U.S.-Mexico Environmental Program, EPA 160/D-02/001. Washington, DC: EPA September 2002. More information on the Border 2012 program available at http://www.epa.gov/ usmexicoborder/.
- 17. The United States and Mexico established the BECC and the North American Development Bank in 1993 to help develop and finance environmental infrastructure projects within 100 km of either side of the U.S.-Mexico border. The BECC works with the border states and local communities to develop and certify projects, and the bank arranges financing for these projects.
- 18. Public Law 107-118, "Small Business Liability Relief and Brownfields Revitalization Act," 2002.
- 19. The Brownfields Program can only report data on the first two quarters of FY 2003, due to the grantee reporting cycle. Data are from the Brownfields Management System (BMS) More information available at <a href="http://www.epa.gov/brownfields/">http://www.epa.gov/brownfields/</a>.
- 20. In 2002, 180,000 cubic yards of contaminated sediment containing more than 430 tons of toxic chemicals were remediated.
- 21. Environment Canada and US EPA, 2002 Great Lakes Binational Toxics Strategy Annual Progress Report, March 2003. Information available at <a href="http://binational.net/bns/2002/index.html">http://binational.net/bns/2002/index.html</a>.

- 22. Additional information available at http://www.chesapeakebay.net/status.cfm?sid=83&subjectarea=.
- 23. More information about EPA's National Coastal assessment available at http://www.epa.gov/emap/nca/index.html.
- 24. Five primary indicators are used to rate coastal conditions in this report: coastal wetland loss, eutrophic condition, sediment contamination, benthic index, and fish tissue contaminants. The five indicators were assigned a score of good, fair, or poor for each coastal area of the United States. The indicator scores were then averaged to create an indicator score for the overall condition of each coastal region. The national score was determined as a weighted average based on the areal extent of estuaries in each region. In 2000, the national score was 2.6 on a scale from 1 (poor) to 5 (good), while the score in the early 1990s was 2.4 percent.
- 25. See http://www.epa.gov/enviro/html/toxic\_releases.html.
- 26. See http://www.epa.gov/triexplorer/.